



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,797	07/19/2006	Salvador Aldrett-Lee	DOW63686NP	1293
31684	7590	08/23/2010		
ARKEMA INC. PATENT DEPARTMENT - 26TH FLOOR 2000 MARKET STREET PHILADELPHIA, PA 19103-3222			EXAMINER GALLIS, DAVID E	
			ART UNIT 1625	PAPER NUMBER
			NOTIFICATION DATE 08/23/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

carol.hill@arkema.com
steven.boyd@arkema.com
thomas.roland@arkema.com

Office Action Summary	Application No. 10/571,797	Applicant(s) ALDRETT-LEE ET AL.	
	Examiner DAVID E. GALLIS	Art Unit 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16, 18-22 and 25-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16, 18-22 and 25-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 16, 18 through 22 and 25 through 36 are pending. Claim 16, 17 and 25 through 28 have been amended. Claims 17 and 24 have been canceled. Applicants' claim to foreign priority by application PCT/US2003/030076 filed September 24, 2003 is acknowledged. Applicants' amendments and arguments filed May 14, 2010 have been entered and carefully considered.

Prior Rejections

2. With regard to the prior rejection of claims 16, 29, and 34 through 36 under 35 U.S.C. 102(b), Applicants have amended claim 16 to require a select group of monomers and alloy of 25% to 50% copper, and argue that Kambara et al. do not teach these specific limitations. Applicants' argument is persuasive. Therefore, the rejection of claims 16, 29, and 34 through 36 as anticipated by Kambara et al. is hereby withdrawn. However, see new rejection under 35 U.S.C. 103(a) below.

3. With regard to the prior rejection of claims 24 through 28 under the second paragraph of 35 U.S.C. 112, Applicants have canceled claim 24 outright, and have amended claims 25 through 28 to depend from claim 16. Therefore, the rejection of claims 25 through 28 as indefinite is hereby withdrawn.

4. With regard to the prior rejection of claims 16 through 22 and 24 through 36 under 35 U.S.C. 103(a), Applicants have canceled claims 17 and 24 outright, and argue that Nakahara et al. disclose the use of nickel-chromium-iron alloy having specific levels of copper and would not lead one to employ an alloy such as Monel®. Applicants' argument is not found persuasive. It would be obvious to try other copper containing

Art Unit: 1625

alloys with a high likelihood of success. Neither the Applicants, nor the prior art has reported a quantitative evaluation of copper content, and in the absence of such, nothing can be considered unique about copper contents of in the range of 25% to 50%. Therefore, the rejection of claims 16, 18 through 22 and 25 through 36 as obvious over Nakahara et al. is maintained for reasons of record.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 16, 29, and 34 through 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kambara et al. (US 5,922,912, July 13, 1999, cited by Applicants').

7. Claims 16, 29 and 34 through 36 are obvious over Kambara et al. teaching the concentration of aqueous acrylamide (AAM, an ethylenically unsaturated monomer), wherein the polymerization of which is inhibited by copper surfaces (heat exchange and piping) in the presence of an oxygen containing gas (air)(see column 4, lines 20-28).

Acrylamide is an obvious variant of acrylic acid both of which have mechanistically equivalent polymerization reactions. Kambara et al. teaches an evaporator system with copper-made piping and a copper-made inner surface in contact with the AAM in which air (21% oxygen) is introduced to the concentrated AAM prior to its introduction (or re-introduction) to the copper lined gas-liquid separator (see Figure 3 and column 11, lines 9-34). Kambara et al. also teach the presence of copper ions which are also clearly

Art Unit: 1625

disclosed to be present in example 3 of the instant disclosure. Furthermore, the requirement for 25% to 50% copper is mere design selection since it is obvious that lower copper content has an inhibiting effect on polymerization.

Conclusion

8. No claims are allowed.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Gallis whose telephone number is 571-272-9068. The examiner can normally be reached on Mon-Fri 7:00-4:00.

Art Unit: 1625

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-1600. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Janet L. Andres/
Supervisory Patent Examiner, Art Unit 1625

David E. Gallis
Patent Examiner